



*The Raleigh Amateur Radio Society's*

# **EXCITER**

February 2009

Issue No. 455

## **LOOK INSIDE FOR DETAILS:**

- The RARS General Meeting is the 1st Tuesday of the month.
- The RARS net meets every night @ 8 pm on 146.64.
- The RARS Technical and Trader's net is Saturdays @ 8:30 pm or following the RARS net.
- RARS meets for a monthly dinner on the 2nd Tuesday of each month.

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## February RARS Meeting

The February RARS meeting will be Tuesday, February 3 at First Alliance Church, 4400 Buffaloe Road. Due to sanctuary renovation, we will meet in the Education Building on the first floor at the end of the hallway on the right. Signs will be in place to direct you. Refreshments begin around 7 PM and the meeting starts at 7:30 PM. There will be VE testing in a nearby room. The program will feature Tim Slay N4IB, ARRL NC Section Manager.

## RARSFest 2009

### **Article by John Snellen AI4RT, RARSFest Chair**

April is fast approaching, and as hard as it is to believe, it's already time for our hamfest. RARSFest will be held on Saturday, April 11 and we have MANY opportunities for you to help your club present North Carolina's BEST hamfest.

RARSFest needs a multitude of volunteers to make the event successful. We have a new volunteer sign-up sheet online at [www.RARS.org](http://www.RARS.org). Along the left side of the main RARS page, there is a row of buttons. Click on the "RARSfest April 11, 2009" button. It will take you to the RARSFest page. While you are there, you can subscribe to "RARSfest News" for the latest updates and information to be sent to you via email. Scroll to the bottom of the RARSFest page and click on "RARSfest volunteer workers sign up here." You will find a whole page of volunteer opportunities. Pick one or two, we will contact you soon. Thank you for your help in making this the best RARSFest yet.

## RARS Officers

### President:

**Selene Montgomery**  
**KG4RMT**  
**919.577.1254**  
**kg4rmt@earthlink.net**

### Vice-President:

**Karl Bowman**  
**W4CHX**  
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### Secretary:

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### Treasurer:

**Greg Seamster**  
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# The Raleigh Amateur Radio Society

The Raleigh Amateur Radio Society, Inc. (RARS) was founded in 1969 and continues to serve and support the Amateur Radio community in the greater Triangle area. In 1999, the society incorporated a new RARS and obtained 501(c)(3) non-profit tax status.

The objectives of the club are to promote worldwide friendship through amateur radio; to be of public service by providing

radio communications in times of disaster, emergency, or civic need; to educate members in radio technique; and to provide training classes to assist in obtaining amateur radio licenses.

Anyone interested in amateur radio is eligible to apply for membership. Dues for regular licensed amateurs are \$18 per year (from July 1 through June 30). Additional immediate family mem-

bers pay \$5 each per year. Dues for licensed amateurs older than 59 or younger than 16 are \$12 per year. Dues for non-licensed associate members are \$9 per year. Applications for membership may be obtained from the treasurer or on the RARS website (RARS.org).



## The *Exciter*

The *Exciter* is the official newsletter of the Raleigh Amateur Radio Society. It appears each month as a PDF on the RARS website at [www.rars.org](http://www.rars.org). Members receive email notification when the latest version is available. Please provide your email address to the Treasurer.

The *Exciter* welcomes articles,

advertising, and other contributions. To submit a piece to the newsletter, please contact the Editor.

The views expressed in the *Exciter* are those of the individual authors and do not necessarily reflect the views of the Editor or RARS.

The Editor reserves the right to edit any and all pieces.

The submission deadline for the January *Exciter* is December 19. The submission deadline for the February *Exciter* is January 16.

All submissions must be final. Drafts are not accepted.

Editor:  
Courtney Enzor  
KI4HOS  
[editor@rars.org](mailto:editor@rars.org)

## Upcoming Hamfests

February 7	FrostFest (ARRL State Convention) Richmond, VA <a href="http://www.frostfest.com/">http://www.frostfest.com/</a>
February 7	Charleston Hamfest Ladson, SC <a href="http://www.wa4usn.org/">http://www.wa4usn.org/</a>
February 13-15	Orlando HamCation and Computer Show Orlando, FL <a href="http://oarc.org/">http://oarc.org/</a>
February 22	WinterFest Annandale, VA <a href="http://www.viennawireless.org/home.php">http://www.viennawireless.org/home.php</a>
February 28	Annual Hamfest Dalton ARC Hamfest Dalton, GA <a href="http://www.w4drc.com/">http://www.w4drc.com/</a>

### **RARS General Meeting**

*Date:* First Tuesday of each month

*Location:* First Alliance Church  
4400 Buffaloe Road  
Raleigh, NC

*Time:* People begin arriving at 7 pm. The meeting officially begins at 7:30 pm.

### **RARS Monthly Dinner**

Join us on the 2nd Tuesday of each month for the RARS dinner. It's open to everyone: RARS members, non-members, friends, and family – feel free to bring your little ones!

We'll be meeting at the Golden Corral on Glenwood Avenue in Raleigh. Dinner begins at 6:30 pm.

### **RARS Repeaters in Raleigh**

145.13 (82.5 PL), 146.64, & 444.525 (82.5 PL)

Join us for the nightly RARS net @ 8 pm on the 146.64. All hams holding a Technician class license or higher are invited to checkin. We welcome both RARS and non-RARS members to the net.

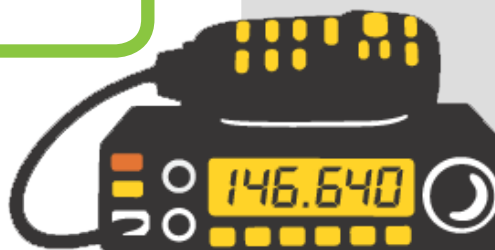
### **VE Testing**

The RARS VEs will accept walk-in testing at the February, May, August, and November RARS meetings; the RARSfest in April; the Cary Swapfest in July; the JARSfest in November; and following RARS license classes.

Please bring a photo ID, your current license, a copy of your current license, and any CSCEs you have for credit. Visit [www.rars.org](http://www.rars.org) for more information.

### Welcome to RARS!

Charlie Davis, Sr.	WA3UTC
Jim Dukeman	KJ4BYN
Chris Rose	KI4RUM
Tiffany Misel	K4TIF
Steve Misel	K4WEB





## ***Ham radio class for those wishing to upgrade to a General Class license***

**+++Please note: MORSE CODE NO LONGER REQUIRED!+++**

A class to prepare folks for the General Class license in ham radio will be held this February, taught by an instructor from the Raleigh Amateur Radio Society (RARS) and hosted by First Alliance Church in Raleigh! This 3-part class will prepare participants for the FCC exam; participants should try to attend all 3 days. The exam will be administered on the final day at the conclusion of instruction. **The class is open to the public.** Details follow:

Dates: Saturdays

Feb. 7, 9 am – Noon

Feb. 14, 9 am – Noon

Feb. 28, 9 am – Noon; Exam at 1 pm

Place: First Alliance Church

4400 Buffaloe Road

Raleigh, NC

Instructor: Mike Murphy WA4BPJ, Raleigh Amateur Radio Society

Cost: \$25.00 for the class (includes manual) and \$14.00 for the exam fee

All participation is by pre-registration. To register for this class, please contact RARS Education Director Virginia Enzor NC4VA at [nc4va@nc.rr.com](mailto:nc4va@nc.rr.com) by **Wednesday, February 4.**

Directions: From downtown Raleigh, head north on Capital Blvd. Turn right on Buffaloe Road and go 1.1 miles. The church is on the right.

The General Class license provides a big step up in operating privileges which allow for cross-country and worldwide communication. To learn more about General Class privileges, please visit the following website: [www.arrl.org](http://www.arrl.org).



## **Article by Cliff Broughton W4FT**

Imaging this situation: you're operating in one of the big contests during the year. You are in the Single Op category, but the contest rules don't allow Single Ops to operate the full duration of the contest. To complicate it further, "off time" has to be 30 minutes or more. How do you reconcile this with when and how long you operate?

Sounds like a no-brainer. Or is it? Have you just gotten yourself disqualified because you didn't know how to apply the rules of the contest? Let's take the scenario above and add to it. The contest started, but you got a late start because of some technical problems. When did the clock start running: at the start of the contest or at your first contact? You took a long break in the middle, and your allotted maximum operating time expires less than 30 minutes before the end of the contest. Were you supposed to stop 30 minutes before the end of the contest because of the 30-minute rule, or could you get the full 10 hours? Are you thinking about the nuances yet?

This is the exact situation I found myself in with the January North American QSO Party-SSB (NAQP), sponsored by the National Contest Journal (NCJ) of the ARRL. The contest runs for 12 hours, but Single Ops are only allowed 10 hours of operating time and off time must be at least 30 minutes long. Because of some technical glitches, I was late getting started. Without thinking about it, I made my first contact at 28 minutes into the contest – a multiplier and my only contact on 15 meters. To make matters worse, I made three more contacts in the next two minutes that were unique multipliers.

Here is the first problem. How would the first 27 minutes be treated? Would they be counted as off time? Would they be operating time because the clock started when the contest started? Would they just be ignored?

Next, I took a long break in the middle of the contest. That would let me operate until 10 minutes before the end of the contest. But wait, if off time has to be at least 30 minutes, doesn't that mean that I need to stop at least 30 minutes before the end of the contest? If I run right up to the 10 hour limit, then that's only 10 minutes to the end. If that last 10 minutes counts, (remember, if it isn't 30 minutes, it isn't off time, right?) then I'm over the 10 hour limit.

So the second problem is this. How do you treat any time after your last contact in light of the 30 minute rule?

The more I thought about it, the more I found different scenarios of how this would end. Almost all of them ended badly, so I decided to ask the people sponsoring the contest.

(Continued on next page)

Bruce Horn of the NCJ was kind enough to provide the answer. This applies to the NAQP, but I suspect that it would apply to any contest where operating time is limited.

Hi Cliff,

At 04:22 AM 1/19/2009, you wrote:

*Hi. Can you please clarify how rule 5.a.iv applies to time off at the start and end of the NAQP contest?*

*Here is my question: When counting off time and operating time, how do you count the time between the start of the contest and your first contact?*

Your operating time begins when you make your first contact.

*Similarly, how do you count the time after your last contact but before the end of the contest?*

Your operating period ends when you make your last contact. Operating time is calculated as the difference between the time of your last QSO and your first QSO, minus any off periods of at least 30 minutes duration.

73 de Bruce, WA7BNM

In short, calculating your operating time is simple.

1. YOUR operating clock starts with your first contact, not the start of the contest.
2. YOUR operating clock stops with your last contact, not the end of the contest.
3. Operating time is measured from the first contact to the last contact. The time off periods in between these contacts are then subtracted to find off time.
4. When time off has to be a certain duration, it is the time off BETWEEN the first and the last contact. Time between the contest start and the first contact, and time between the last contact and the end of the contest can be any duration.

So, as it turns out, the simplest approach is the right one. Count your start time, your end time, and subtract out the time off in the middle, as long as it was 30 minutes or more at a stretch.

By the way, on a separate note, there was a blurb that I saw recently about exactly how to count the time. Don't ask me where, I've been trying to find it again. Basically, any whole minute that contains a contact counts as operating time and they count whole minutes to keep it

simple for the computers. Don't count seconds or parts of minutes.

Here's an example. An operator makes a contact at 17:10:01. He makes another contact at 17:40:59. That's exactly 30:58 and exceeds the 30 minute rule, right? WRONG! First, throw out the seconds. That means 17:10 to 17:40. Next, by rule, those minutes are operating time. The off time is really 17:11 to 17:39 or 29 minutes. Since it is shorter than 30 minutes, it is considered as operating time. Best to take at least 31 or 32 minutes when you take off time.

So that's it. That's the way the rules people look at operating time and time off in a contest. Well, at least, in the NAQP contest. It's probably safe to apply the same logic to any contest that works this way. By the way, here are some of the contests that I found where this is important:

NCJ NAQP January Sweepstakes	10 out of 12 hours
ARRL November Sweepstakes	24 out of 30 hours
ARRL 10 meter Contest	36 out of 48 hours

## PRESIDENT'S CORNER

### **Column by Selene Montgomery KG4RMT, RARS President**

The snowfall on January 20th made it necessary to postpone the scheduled RARS Board meeting. Lucky for me, the board has an email list that makes it easy to notify the board members of any items of importance, including meeting cancellations.

RARS has a list server for its members. There is an excellent article in the February 2007 EXCITER explaining in depth what this item is, how to use it, and how to join. (The EXCITER archives on the RARS website contains all of the past EXCITERS back to 1998.)

I encourage all of our members to take advantage of our list server. Contrary to rumor, there are not very many postings, so you will not be bombarded with email. Ninety-nine percent of the time, you will know by the subject if you want to open the email or not. This is not only a convenient way to get RARS news to you regarding our meetings and other events, but it's also an easy way for you to communicate with the club at large with items to sell, news tidbits, or other information you wish to share.

If you have any questions about the list server, the above-mentioned article will answer most, if not all, of those questions. If you're not currently signed up, please do so. You can follow the directions in the article, or use the appropriate button on the first page of the RARS website (rars.org) entitled RARS-L Email List.

Speaking of the RARS website – please take the time to look it over. Many changes and updates have been made, and more are in the works. Let the Webmaster know what you like or don't like. This website is a representation of what we are as a club, and everyone's input is important. It is a great way for you to keep up with what is going on in, and around, your club.

## Minutes of the January 6, 2009 RARS General Meeting

The Raleigh Amateur Radio Society held its monthly meeting on January 6, 2009 at the First Alliance Church on Buffalo Road in Raleigh. There were 64 members and guests present. At 7:32 PM President Selene KG4RMT called the meeting to order. She invited everyone to move forward for better positions for the program. The following visitors were then introduced: Kirk, Jim KI4BYM, Paul AH6LS, Paul KE4TMN, Don N8DDK, and Ian.

Our new VP Karl W4CHX, advised that a presentation by Tim Slay, N4IB, our ARRL NC Section Manager would be the program for February.

Gary KN4AQ advised that the FCC, via the ARRL, has asked the amateur radio community to help explain the new analog to digital TV concept and answer questions that people may have about it. UNC-TV channel 4 has asked that amateur radio operators help man a phone bank to answer questions that viewers may have about the new digital TV.

Gary KN4AQ will be selling a six DVD set of the 2008 Digital Communications Conference.

Treasurer Greg KE4PAX gave his report. We have 247 members. We have donated funds to AMSAT and our SERA membership is due.

President Selene made the following announcements:

- RARS monthly dinner will move back to the Golden Coral on Glenwood Ave. Our next supper will be on the 13th at 6:30 PM.
- The Board meeting will be on Tuesday, January 20 at the Triangle Radio Reading Service on Six Forks Rd. All RARS members may attend.
- There will be an after meeting social. Just hang around after the meeting tonight.
- There will be VE testing at our February meeting.
- The Winston-Salem hamfest will be on January 10th.
- The Richmond, VA and Charleston, SC hamfests will be on February 7.
- There have been many changes to the RARS web page. Everyone is encouraged to look at it. A big thank you to Hank K4HM.
- Thanks to Mike KB7NLA for his assistance so that our repeater can now give real people voice announcements.

The following committee reports were given:

- Virginia NC4VA announced that there would be a General Preparation Class in February on the 7th, 14th, and 28th. The class will be at the First Alliance Church. Preregistration is required. Email [nc4va@nc.rr.com](mailto:nc4va@nc.rr.com) The price is \$25 and includes the manual.
- Virginia NC4VA advised that the Skywarn net will meet tonight on the 146.88 repeater. The

- January 26th net will include a presentation on aviation forecasting.
- John AI4RT Public Service Chair advised that ham operators have been asked to assist with the Governor's inauguration on January 10th. Please go to [hampublicservice.org](http://hampublicservice.org) to sign up to help.
- Steve KA8HXX announced that Powell Elementary School has a amateur radio station and gives classes. The school is a magnet school and will be doing some recruiting on Saturday the 10th. Help is needed from local hams to talk with the students on the repeater.

President Selene recognized our *Exciter* editor, Courtney KI4HOS. Courtney received a large round of applause.

The door prize drawing of a 2008 Handbook was won by KE4TMN.

Former VP Rick KB4TKQ then introduced Glen K1GW and John KF4EUZ who gave us a presentation on the Softrock 40 receiver and Software Defined Radios. The concept is pretty basic, just have a radio feeding signals to the computer and the computer does all the rest. They demonstrated a \$15 Softrock 40 Meter Receiver kit and how the computer controls what you want: CW, SSB, PSK 31, or whatever. Do you know what I&Q is? Me neither, but it must be important Glen and John kept talking about it. You can even run CW Skimmer. It will take a 200 MHz Pentium computer or better to run this software. We were then treated to some video about surface mount technology, the tools you will need and how to do it. So, are you interested in doing a Softrock 40 kit? Contact Glen K1GW or John KF4EUZ.

Following the program, President Selene thanked everyone for donations to the refreshment fund. She asked if everyone was happy with our new meeting location at First Alliance Church and received a positive round of applause. Next, we were reminded of the after-meeting social and our next meeting on February 3rd.

Meeting adjourned at 8:50 PM

### February Birthdays

Sue	W2GHK	2/2	Dennis	AJ4HK	2/13
Danny	KD4RAA	2/2	Bob	AG4OP	2/13
Maury	WW4MC	2/2	Mike	K1MW	2/14
Selene	KG4RMT	2/3	James	KB2IYS	2/16
LOS	AF0AA	2/3	Don	NJ2E	2/18
Lillian	KC4AYH	2/4	Howard	K3EPN	2/19
Bill	WI4REP	2/5	Joe	N1LVN	2/21
Art	W2JNW	2/6	Charlie	WA3UTC	2/24
Larry	N4LEW	2/7	Joe	W4TTO	2/25
Carl	KU4HM	2/9	Bob	WX4MMM	2/26
Buddy	KD4PCD	2/10	Hans	W2UF	2/27
Harriette	KF4SER	2/10	Tom	WA4OTA	2/27
Glen	KJ4GKO	2/10	Mary	KG4OQA	2/28
Jim	K4HCG	2/12			

### Bonus Birthdays!

Donald Herring KJ4DNI 11/21  
George Herring 12/11

### December 2009

#### RARS Net Reports

Checkins: 330  
Traffic: 23/20  
Minutes: 405  
Sessions: 31

Special Interest Nets:  
Checkins: 90  
Minutes: 490  
Sessions: 13



The **RARS Technical & Trader's net** is held on Saturday evenings on the 146.64 after the 8 pm RARS net.

# Amateur Radio Nets



The **VOIP Hurricane net** is held Sundays at 00:00 UTC on the 146.775 repeater with a tone of 88.5 (IRLP node 4260). For information about activation details, go to [www.voipwx.net](http://www.voipwx.net).

Please join us on the **Carolina 440 net** every Monday night at 7:30 pm. This ragchew net utilizes the Carolina 440 UHF Link Repeater System. Comprised of the Raleigh, Down East, and Costal Wilmington link systems, there are currently 19 repeaters on the system, covering 21,168 square miles. For a list of these repeaters, please visit [www.carolina440.net](http://www.carolina440.net).



**CAROLINA 440**  
**UHF Link System**  
[www.carolina440.net](http://www.carolina440.net)

Join us every evening at 8 pm on the 146.64 repeater for the **RARS Two Meter net**. You can give a ragchew, check in and out (this counts for our total numbers reported to the ARRL!), make announcements, and pass traffic. We also offer National Traffic System traffic training. All licensed stations are welcomed to participate in the net as often as they can. This net is also a great way to learn about amateur radio if you are newly licensed!

The **PCTN (Piedmont Coastal Traffic Net)** meets every night at 9 pm on the 146.88. The purpose of the net is to handle/pass NTS formal messages. Amateur stations are encouraged to check-in and participate. The backup repeater is the 147.105 machine with a PL tone of 82.5.





Join the **Tarheel Short Wave Listening (SWL) Special Interest Group (SIG)** net on Monday evenings @ 9 pm on 146.64. We discuss all areas of radio monitoring and welcome your logs! We also have a SWL/SIG meeting on the third Monday of the month in addition to our regular net.

### Central Carolina SKYWARN

Please join us each Tuesday at 9:15 pm on the 146.88 repeater for the CCS net. On each net there are announcements, check-ins by county, and often a program or training spot. Check us out at [www.centralcarolinaskywarn.net](http://www.centralcarolinaskywarn.net).



February 3: "Driving and Winter Weather" with guest speaker Wake Forest Fire Department Captian Jake Alderman KG4VDM.

February 17: "Radio Check Night" with Emergency Coordinator Virginia Enzor NC4VA.



### Apex Emergency Response Communications Net

This net meets weekly each Sunday evening at 9:00 pm on the 146.64 repeater. The purpose of the net is to assist ham radio operators in preparing to respond to emergencies, test their equipment, improve operating skills, pass traffic, and to provide those with a common interest an opportunity to meet. The Apex ERC Net provides amateur radio emergency communications for the Church of Jesus Christ of Latter-day Saints. All stations are invited to participate in this net.



The **Wake County ARES** net meets Thursdays around 2115 on the 146.88 repeater. We provide discussion and training for the implementation and provision of Emergency Communications for our served agencies, such as the American Red Cross and the local and state Emergency Operations Center. Please join us. [www.wakeares.org](http://www.wakeares.org).

The RARS

**~~Exciter~~**

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Thanks for being part of RARS!

For the latest information on upcoming  
events, programs, and more,  
check out [www.rars.org](http://www.rars.org).

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